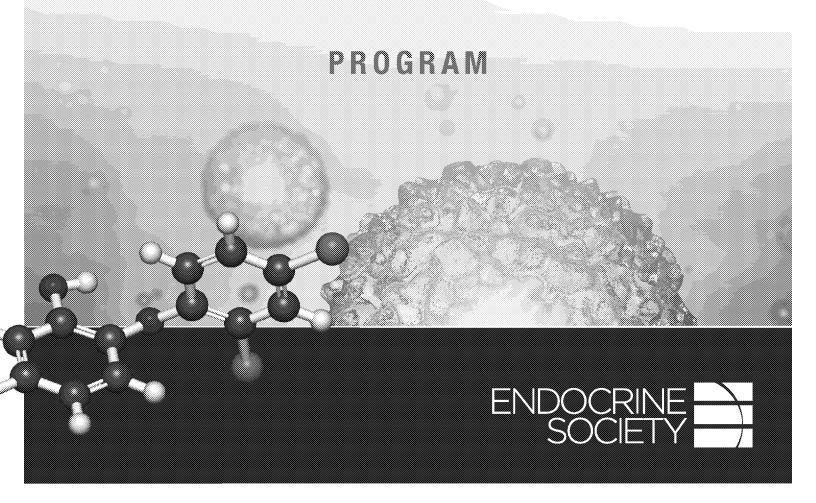


# ENVIRONMENTAL STRESSORS IN DISEASE AND IMPLICATIONS FOR HUMAN HEALTH

OCTOBER 26 - 29, 2014
BOSTON, MA





# **Environmental Stressors in Disease and Implications for Human Health**

Boston Marriott Long Wharf Hotel 296 State Street, Boston, MA 02109

October 26 – 29, 2014 endocrine.org/pptox

# **PPTox IV PROGRAM**

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## COMMITTEES

#### ORGANIZING COMMITTEE

#### Robert Barouki, ND, PhD

Université Paris Descartes Universitaire des Saints Pères France

#### David C. Bellinger, PhD

Harvard School of Public Health USA

#### Ruth Etzel, MD, PhD

University of Wisconsin-Milwaukee Joseph J. Zilber School of Public Health USA

#### Philippe Grandjean, ND, DMSc

University of Southern Denmark, Denmark Harvard School of Public Health, USA

#### Kimberly A. Gray, PhD

National Institute of Environmental Health Sciences/NIH USA

#### Jerrold J. Heindel, PhD

National Institute of Environmental Health Sciences/NIH USA

#### Katherine Herz,

Harvard School of Public Health USA

#### Margaret Rita Karagas, PhD

Geisel School of Medicine at Dartmouth

#### Toshihiro Kawamoto, MD, PhD

University of Occupational and Environmental Health Japan

#### Bruce P. Lanphear, ND, NPH

Simon Fraser University Canada

#### B. Paige Lawrence, PhD

University of Rochester Medical Center School of Medicine and Dentistry USA

#### Peter van den Hazel, MD, MPH

International Network for Children's Health, Environment and Safety, The Netherlands





# COMMITTEES

#### SCIENTIFIC PLANNING COMMITTEE

#### Bruce Blumberg, PhD

University of California-Irvine, USA

#### Ludwine Castelevn. ND

University of Leuven, Belgium

#### Sylvaine Cordier, PhD, DSc

Institut National de la Santé et de la Recherche Médicale, France

#### Eun-Hee Ha, MD, PhD

Ewha Womans University School of Medicine, Korea

#### Juliette Legler, PhD

VU University Amsterdam, The Netherlands

#### Sharon Munn, PhD

European Commission's Joint Research Centre, Italy

#### Katsuyuki Murata, MD, PhD

Akita University School of Medicine, Japan

#### Emily Oken, MD, MPH

Harvard Medical School, USA

#### Frederica P. Perera, DrPH, PhD

Columbia University Mailman School of Public Health, USA

#### Gall Susan Prins, PhD

University of Illinois-Chicago, USA

#### Alvaro Puga, PhD

University of Cincinnati, USA

#### David H. Sherr, PhD

Boston University School of Public Health, USA

#### Michael Kirtland Skinner, PhD

Washington State University School of Biological Sciences, USA

#### Peter D. Siy, MBBS, MD, FRACP, DSc

The University of Queensland, Australia

#### William Suk, PhD, NPH

National Institute of Environmental Health Sciences/NIH, USA

#### Jordi Sunyer, MD, PhD

Centre for Research in Environmental Epidemiology, Spain

#### Jorma Toppari, MD, PhD

University of Turku, Finland

#### Cheryl Lyn Walker, PhD, ATS, FAAAS

Texas A&M Health Science Center, USA

#### Pál Weihe, ND

Faroese Hospital System/University of Southern Denmark, Faroe Islands

#### Tracev J. Woodruff, PhD, MPH

University of California-San Francisco, USA



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# BACKGROUND/OBJECTIVES/ONLINE

#### BACKGROUND

Prenatal Programming and Toxicity (PPTox) is a series dedicated to cutting-edge discussion of environmental hazards during early life and long-term consequences. The conference provides an opportunity to review the current knowledge, to identify new research opportunities, gaps and challenges, and to integrate basic and applied research across disciplines. The conference is conceived to be a forum to share past, present, and future research results and potentials, and to discuss further elucidation of scientific conundrums, their public-health consequences, clinical implications, and other societal issues.

This year's topic is *Environmental Stressors in Disease and Implications for Human Health*. Fetal and early postnatal development constitutes the most vulnerable period of human life. Adverse effects of environmental stressors can lead to functional deficits and increased disease risk later in life. The principle of environmental exposures leading to altered programming and increasing susceptibility to disease later in life has gathered much support from experimental and epidemiological studies. Similar observations have been made on the long-term impact of nutritional imbalance during early development.

PPTox IV brings together researchers interested in understanding the role of environmental stressors in development with a focus on chemical exposures that specifically have a side effect of interfering with hormone action that alters developmental programming leading to increased susceptibility to disease across the lifespan and generations.

The Endocrine Society is co-sponsoring the fourth international summit of PPTOX in Boston, Massachusetts. As a leader in endocrine education, the Endocrine Society recognizes the integral role that the endocrine system and endocrine diseases play in disease and dysfunction. Endocrine Society has also established two task forces of members across the globe to expand its capability in enhancing awareness and understanding of endocrine disrupting chemicals and endocrine effects of environmental stressors.

For additional program information, including presentation abstracts, visit <a href="mailto:endocrine.org/pptox">endocrine.org/pptox</a>.

#### OBJECTIVES

The conference will examine the animal and human data supporting this hypothesis by disease, organ system, and mechanism in order to review the current state of the literature and to identify mechanisms for the effects as well as to identify research gaps and challenges and to integrate the basic and applied science.

The following items will be discussed during the meeting:

- New epidemiological and toxicological evidence for the contribution of developmental exposure to diseases across the lifespan and generations focusing on EDCs
- Predictive value of animal and alternative models
- ▶ The essential contribution of epigenetics to programming
- ▶ The effect of chemical or physicals insults as well as nutritional imbalance on stem cells
- ▶ The long path from discovery to clinical application and regulation
- ► The development of a global network of researchers and institutions working on the role of chemicals, nutrition and stress during development in the etiology of non-communicable diseases.

# ONLINE MATERIALS AT endocrine.org/pptox

In an effort to be environmentally conscious, registrants are encouraged to use the online PPTox IV resources to view conference materials. Download materials to your computer, smartphone, or tablet.

Presenter and Poster Abstracts
Presenter Presentations as Permitted
Poster Presenter Instructions



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#### TRAVEL GRANT AWARDEES

The following awardees are recognized for their exceptional research. In-training and early career awardees include oral and poster presentations.

#### Presenting on Monday, October 27

Ana Maria Mora, MD, PhD

Central American Institute for Studies on Toxic Substances (IRET). Universidad Nacional

Poster presentation number MON-29

Byungmi Kim

**Ewha Womans University** 

Poster presentation number MON-27

Christopher Kassotis

University of Missouri

Poster presentation number MON-47

Jennifer J. Adibi, MPH, ScD

Graduate School of Public Health, University of Pittsburgh

Poster presentation number MON-53

Marcela Tamayo y Ortiz, ID, ScM, ScD

Instituto Nacional de Salud Publica, Mexico

Oral presentation during Breakout 4: Novel strategies for

prospective birth cohorts

Maria Skaalum Petersen, MSc. PhD

Department of Occupational Medicine and Public Health

Poster presentation number MON-62

Rebecca M. Nachman, PhD, MPH

Johns Hopkins Bloomberg School of Public HealthOral presentation during Breakout 4: Novel strategies for

prospective birth cohorts

Rebecca N. Bauer, PhD

Stanford University

Poster presentation number MON-6

Shotaro Kawazoe

Tokyo University of Science

Poster presentation number MON-26

Todd A Jusko, PhD,

University of Rochester School of Medicine and Dentistry

Oral presentation during Breakout 3: Effects of

developmental exposures on immune functions

Vinicius Carreira, DVM, DACVP

University of Cincinnati

Poster presentation number MON-1

# Presenting Tuesday, October 27

Anne G Hoen, PhD

Geisel School of Medicine at Dartmouth

Oral presentation during Breakout 7: Emerging concepts,

new endpoints and methodologies

Deepti Sood

Imperial College London

Poster presentation number TUES-41

Kevin Fournier

Ecole des hautes études en santé publique

Oral presentation during Breakout 6: Challenges in

improving exposure assessments

Kristina Mattsson, MSc

Division of Occupational and Environmental Medicine

Oral presentation during Breakout 5: Developmental

exposures and diabetes pathogenesis

Maribel Casas, PhD

Centre for Research in Environmental Epidemiology

Poster presentation number TUES-30

Samantha L Kingsley, MPH Brown University

Poster presentation number TUES-39

Syed Moshfiqur Rahman, BS

Karolinska Institutet

Poster presentation number TUES-49

Sylvie Remy

University of Antwerp

Poster presentation number TUES-28

Vasilis G Moisiadis, BSc

University of Toronto

Oral presentation during Plenary IV: Developmental

exposures and neurobehavioral disorders



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#### PROGRAM

#### Sunday, October 26 - Wednesday, October 29, 2014

- Registration check-in begins 4:00 PM, Sunday, October 26. PPTox IV registration includes printed program, coffee and lunch service for the day(s) you are registered. Registration is required to attend scientific and poster sessions.
- Plenary Sessions will take place in the Grand Ballroom, Salon A.
- Odd-numbered Breakout Sessions will also take place in the Grand Ballroom, Salon A.
- Even-numbered Breakout Sessions will take place in the Harborview Ballroom.
- Poster presentations will take place on Monday Tuesday, October 27-28, in the Grand Ballroom, Salon G.

#### SUNDAY, OCTOBER 26, 2014

#### 6:00-6:40 PM **OPENING SESSION** GRAND BALLROOM, SALON A

6:00PM	Opening comments and travel award announcements –
	Philippe Grandjean, MD, DMSc, <i>University of Southern</i>
	Denmark, Denmark/Harvard School of Public Health, US
6:10PM	PPTOX as a development origin of new science and new
	public health - Philippe Grandjean, MD, DMSc
6:20PM	Developmental Origins of Health and Disease (DOHaD): A
	good start lasts a lifetime - Linda S. Birnbaum, PhD,
	NIEHS/NTP/NIH
6:30PM	Developmental origins of global health - Emiko Todaka,
	PhD, World Health Organization

#### 6:45-8:00 PM **OPENING RECEPTION** HARBORVIEW BALLROOM

Includes cash bar and lite hors d'oeuvres.

#### MONDAY, OCTOBER 27, 2014

#### 8:30-10:00AM

9-15AM

PLENARY SESSION I: DEVELOPMENTAL EXPOSURES AND ALTERED REPRODUCTIVE SYSTEMS IN MEN AND WOMEN GRAND BALLROOM, SALON A

Session Chairs: Sylvaine Cordier, PhD, DSc, Institut National de la Santé et de la Recherche Médicale (France) and Jorma Toppari, MD, PhD, University of Turku (Finland)

	·····
8:35AM	The androgenic action of stress during fetal development -
	Shanna H. Swan, PhD, Icahn School of Medicine at Mount
	Sinai (US)

8:55AM	Prenatal origin of polycystic ovarian syndrome –			
	Evi Diamanti-Kandarakis, MD, PhD, Univ of Athens Medical			
	School (Greece)			

Organochlorine pesticide exposure and development in boys through puberty - Russ Hauser, MD, MPH, ScD, Harvard

School of Public Health (US)

9:35AM Sperm abnormalities in young men with lifetime exposure to dichlorodiphenyldichloro-ethylene and polychlorinated

biphenyls - Heather A. Young, PhD, MPH, CHES, George Washington University School of Public Health and Health Services (US)

9:50AM Moderated Panel Q&A 10:00-10:30AM **Break** 

#### 10:30AM-12:00PM

#### MORNING BREAKOUT SESSIONS

BREAKOUT SESSION 1 - GRAND BALLROOM, SALON A ADVANCES AND INSIGHTS FROM EPIGENETICS

Session Chairs: Andrea Baccarelli, MD, MPH, PhD, Harvard School of Public Health(US) and Frederica P. Perera, DrPH, PhD, Columbia University Mailman School of Public Health (US)

10:35AM Environmental estrogens activate non-genomic signaling to developmentally reprogram the epigenome - Cheryl L. Walker, PhD, Texas A&M Health

Science Center (US)

10:55AM Validation of altered epigenetic marks in human blood cells - Douglas A. Bell, PhD, NIEHS/NIH (US)

Cell distribution prediction from DNA methylation 11:15AM data using a reference set derived from umbilical cord blood - Julie Herbstman, PhD ScM, Columbia Mailman

School of Public Health (US)

11:30AM Are differences in methylation in cord blood DNA

associated with prenatal exposure to alcohol? - Luisa Zuccolo, PhD, MSc, University of Bristol (UK)

11:45AM Moderated Panel Q&A

BREAKOUT SESSION 2 - HARBORVIEW BALLROOM ROLE OF THE PLACENTA IN DEVELOPMENTAL ORIGINS OF **HEALTH AND DISEASE** 

Session Chairs: Peter van den Hazel, MD, MPH, International Network for Children's Health, Environment and Safety (The Netherlands) and Claudine Junien, PharmD, PhD, Institut National de Recherche Agronomique (France)

10:35AM Placental epigenetic mechanisms - Carmen Marsit, PhD, Dartmouth, Geisel School of Medicine

Sex-specific placental responses in fetal development 10:55AM

- Cheryl S. Rosenfeld, PhD, DVM, University of Missouri

College of Veterinary Medicine

11:15AM First trimester phthalate and phenol exposure is

associated with miRNA alterations in the placenta -Karin Michels, ScD, PhD, Harvard Medical School

11:30AM Sexually dimorphic effect of gestational exposure to BPA

on DNA methylation pattern in the rat placenta - Julie

Fudvoye, University of Liege (Belgium)

11:45AM Moderated Panel Q&A

#### 12:00-1:30PM Lunch and Poster Session

Box lunch available to registrants outside Grand Ballroom, Salon A. Poster session with presenters in Grand Ballroom, Salon G



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#### 1:30-3:00PM

# PLENARY SESSION II: TRANS-GENERATIONAL INHERITANCE GRAND BALLROOM, SALON A

Session Chairs: Lisa H. Chadwick, PhD, National Institute of Environmental Health Sciences/NIH (US) and Ruth Etzel, MD, PhD, University of Wisconsin-Milwaukee (US)

1:35PM Paternal dietary effects on offspring metabolism – Oliver J.

Rando, MD, PhD, University of Massachusetts Medical School

(US)

1:55PM Genomic imprinting, physiology and transgenerational

inheritance - Martha Susiarjo, PhD, *University of Pennsylvania Perelman School of Medicine (US)* 

2:15PM Transgenerational effects on behavior resulting from BPA

exposure - Emilie F. Rissman, PhD, University of Virginia

School of Medicine (US)

2:30PM Developmental exposure to 2,3,7,8,-tetrachlorodibenzo-pdioxin (TCDD) has implications for multi- and

transgenerational effects on antiviral immunity - Christina

M Post, University of Rochester School of Medicine and

Dentistry (US)

2:45PM Moderated Panel Q&A

#### 3:00-3:30PM Break

#### 3:30-5:00PM

#### AFTERNOON BREAKOUT SESSIONS

BREAKOUT SESSION 3 – GRAND BALLROOM, SALON A EFFECTS OF DEVELOPMENTAL EXPOSURES ON IMMUNE FUNCTIONS

Session Chairs: B. Paige Lawrence, PhD, University of Rochester Medical Center School of Medicine and Dentistry (US) and David H. Sherr, PhD, Boston University School of Public Health (US)

3:35PM Trichloroethylene-induced epigenetic changes in T cell

functions - Kathleen Gilbert, PhD, Arkansas Children's

Hospital Research Institute (US)

3:55PM Immune dysfunction in children with prenatal

immunotoxicant exposures - Berit B. Granum, PhD,

Norwegian Institute of Public Health (Norway)

4:15PM Early life environmental exposures and reduced

response to infant tuberculosis vaccination - Todd Jusko, PhD, *University of Rochester School of Medicine* 

and Dentistry (US)

4:30PM Fetal hematopoietic stem cells are the coalmine

canaries portending adverse later-life immune outcomes – Michael Laiosa, PhD, *University of* 

Wisconsin-Milwaukee (US)

4:45PM Moderated Panel Q&A

BREAKOUT SESSION 4 - HARBORVIEW BALLROOM NOVEL STRATEGIES FOR PROSPECTIVE BIRTH COHORTS

Session Chairs: Ludwine Casteleyn, MD , University of Leuven (Belgium)

and Kimberly A. Gray, PhD, NIEHS/NIH (US)

3:35PM Birth cohort research as part of public health

interventions - Pál Weihe, MD, Faroese Hospital System

(Faroe Islands)

3:55PM Strategies and results from the Japan Environment

and Child Cohort - Shoji F. Nakayama, MD, PhD, National Institute for Environmental Studies (Japan)

4:15PM Prenatal exposure to stress modifies the association

between prenatal lead and infant neurodevelopment

- Marcela Tamayo y Ortiz, ID, ScM, ScD, Instituto Nacional de Salud Publica, Mexico (Mexico) 4:30PM

Individual and joint association of exposure to ambient PM2.5 and ozone and maternal smoking with preterm birth in the Boston Birth Cohort –

Rebecca Nachman, PhD, MPH, Johns Hopkins Bloomberg School of Public Health (US)

4:45PM Moderated Panel 0&A

#### 5:00-6:30PM Poster Reception

Poster session with presenters in Grand Ballroom, Salon G. Lite refreshments will be available.

## TUESDAY, OCTOBER 28, 2014

#### 7:30-8:15AM

BREAKFAST DISCUSSIONS – COMMONWEALTH BALLROOM SUITES

Concurrent discussion sessions moderated by expert faculty. Breakfast available in Palm Garden Suite from 7:00–8:30 AM.

Quincy Ste Experimental approaches to DOHaD - B. Paige

Lawrence, PhD, University of Rochester Medical Center

School of Medicine and Dentistry (US)

Haymarket Ste Consideration of developmental exposures in risk

assessment - Babasaheb (Bob) R. Sonawane, PhD, US

Environmental Protection Agency (US)

Beacon Ste Communicating with the public on developmental

origins - Ami R. Zota, ScD, MS, George Washington University and Elise Miller, Med, Collaborative on Health

and the Environment

Faneuil Ste Clinical implications of developmental exposures -

Jean-Pierre Bourguignon, MD, PhD, Université de Liège

(Belgium

Constitution Ste Biomedical ethics - Ruth Etzel, MD, PhD, Univ of

Wisconsin-Milwaukee (US) and Carl F. Cranor, PhD, MSL,

Univ of California-Riverside (US)

#### 8:30-10:00AM

PLENARY SESSION III: DEVELOPMENTAL EXPOSURES IN OBESITY ETIOLOGIES GRAND BALLROOM, SALON A

Session Chairs: Bruce Blumberg, PhD, *University of California-Irvine* and Sharon Munn, PhD, *European Commission Joint Research Centre (Italy)* 

8:35AM Pre- and postnatal exposure to persistent pollutants and obesity – Damaskiní Valvi, MD, MPH, Centre for Research in

Environmental Epidemiology (Spain)

8:55AM Maternal exposure to BPA and obesity in the next

generation - Beverly S. Rubin, PhD, Tufts University School of

Medicine (US)

9:15AM Integration of experimental and epidemiological approaches to developmental obesogenicity – Juliette

Legler, PhD, VU University Amsterdam (The Netherlands)

9:35AM Prenatal phthalate exposures and body mass index among 4 to

7 year old children: A pooled analysis - Jessie Buckley, MPH,

University of North Carolina-Chapel Hill

9:50AM Moderated Panel Q&A



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#### 10:30AM-12:00PM

#### MORNING BREAKOUT SESSIONS

	SESSION 5 – GRAND BALLROOM, SALON A :NTAL EXPOSURES AND DIABETES PATHOGENESIS
	s: Ana Navas-Acien, MD, Johns Hopkins Bloomberg School
Public Health	th (US) and Qi Sun, MD, ScD, MMS, Harvard School of
10:35AM	Abnormalities of glucose metabolism in children exposed to diabetogenic environmental chemicals – Tina K. Jensen, MD, <i>University of Southern Denmark</i> (Denmark)
10:55AM	Prenatal air pollution exposure induces sexually dimorphic fetal programming of metabolic outcomes in adult offspring – Jessica L. Bolton, <i>Duke University</i> (US)
11:15AM	Maternal smoking during pregnancy and offspring type 1 diabetes mellitus risk: Accounting for HLA haplotype – Kristina Mattsson, MSc, Division of Occupational and Environmental Medicine (Sweden)
11:30AM	Developmental exposure to the endocrine disruptor tolylfluanid alters energy metabolism in adult mice – Rober M. Sargis, MD, PhD, <i>University of Chicago (US)</i>
11:45AM	Moderated Panel Q&A

# BREAKOUT SESSION 6 – HARBORVIEW BALLROOM CHALLENGES IN IMPROVING EXPOSURE ASSESSMENTS

Session Chairs: Eun-Hee Ha, MD, PhD, Ewha Womans University School of Medicine (Korea) and William Suk, PhD, MPH, NIEHS/NIH

10:35AM	Environment-wide association studies of			
	developmental exposures - Chirag J. Patel, PhD,			

Harvard Medical School (US)

10:55AM Identifying Cumulative Exposures to Chemicals in Pregnant Women – A Non-Targeted Exposome Approach

- Tracey J. Woodruff, PhD, MPH, University of California-

San Francisco (US)

11:15AM Urinary concentrations of polycyclic aromatic

hydrocarbons in Israeli adults: Demographic and lifestyle predictors – Hagai Levine, MD, MPH, *Braun School* of *Public Health and* Community Medicine, Hebrew

University-Hadassah (Israel)

11:30AM Derivation of cumulative toxicity indicators for indoor

semi-volatile organic compounds: The case of reprotoxic and neurotoxic mixtures – Kevin Fournier, Ecole des hautes études en santé publique (France)

11:45AM Moderated Panel Q&A

#### 12:00-1:30PM Lunch and Poster Session

Box lunch available to registrants outside Grand Ballroom, Salon A. Poster session with presenters in Grand Ballroom, Salon G

#### 1:30-3:00PM

# PLENARY SESSION IV: DEVELOPMENTAL EXPOSURES AND NEUROBEHAVIORAL DISORDERS GRAND BALLROOM, SALON A

Session Chairs: David C. Bellinger, PhD, Harvard School of Public Health (US) and Peter D. Sly, MBBS, MD, FRACP, DSc, FThorSoc, The University of Queensland (Australia)

1:35PM Novel approaches to assessing cognitive function in early

infancy - Susan L. Schantz, PhD, University of Illinois at Urbana-

Champaign (US)

1:55PM Air pollution and developmental neurotoxicity – Jordi Sunyer

Deu, MD, PhD, Centre for Research in Environmental

Epidemiology (Spain)

2:15PM Early-life lead exposure in vulnerability to Alzheimer's-like

neurodegeneration - Nasser H. Zawia, PhD, University of Rhode

Island (US)

2:30PM Prenatal Synthetic Glucocorticoids and Multigenerational

Paternal Programming of Offspring Behaviour and HPA Function – Vasilis G. Moisiadis, BSc, *University of Toronto* 

(Canada)

2:45PM Moderated Panel Q&A

#### 3:00-3:30PM Break

#### 3:30-5:00PM

#### AFTERNOON BREAKOUT SESSIONS

BREAKOUT SESSION 7 – GRAND BALLROOM, SALON A EMERGING CONCEPTS, NEW ENDPOINTS AND METHODOLOGIES

Session Chairs: Margaret R. Karagas, PhD, Dartmouth, Geisel School of Medicine (US) and Toshihiro Kawamoto, MD, PhD, University of

Occupational and Environmental Health (Japan)

3:35PM Developmental stress and children's telomere length -

Daniel A. Notterman, MD, Princeton

University/Pennsylvania State University (US)

3:55PM Identification of epigenetic patterns in birth cohorts - Allan

C. Just, PhD, Harvard School of Public Health

4:15PM Arsenic exposure, breast feeding and infant microbiome

composition in a US birth cohort - Anne G. Hoen, PhD,

Geisel School of Medicine at Dartmouth (US)

4:30PM Potential impact of pesticide exposures during pregnancy

on the newborn's metabolome - Nathalie Bonvallot,

INSERM IRSET (France)

4:45PM Moderated Panel Q&A

#### BREAKOUT SESSION 8 – HARBORVIEW BALLROOM EARLY LIFE ANTECEDENTS OF CANCER

Session Chairs: Robert Barouki, MD, PhD, Université Paris Descartes Centre Universitaire des Saints Pères (France) and David Christiani, MD, MPH, MS, Harvard School of Public Health (US)

3:35PM Stem cells as targets that lead to increased cancer

susceptibility - Gail S. Prins, PhD, University of Illinois-

Chicago (US)

3:55PM Progesterone and overlooked endocrine pathways in

breast cancer pathogenesis – Cathrin Brisken, MD, PhD, Ecole Polytechnique Federale de Lausanne, Swiss Institute for Experimental Cancer Research (ISREC) (Switzerland)

4:15PM Prenatal and lifespan exposure enhances the sensitivity of

carcinogenicity bioassays: The cases of artificial

sweeteners aspartame and sucralose - Michela Padovani,

Cesare Maltoni Cancer Research Center, Ramazzini

Institute (Italy)



4:30PM Prenatal exposure of mice to the human liver carcinogen Aflatoxin B1 reveals a critical window of susceptibility to

genetic change - Supawadee Chawanthayatham, PhD,

Massachusetts Institute of Technology (US)

4:45PM Moderated Panel Q&A

#### 5:00-6:30PM **Poster Reception**

Poster session with presenters in Grand Ballroom, Salon G. Lite refreshments will be available

# WEDNESDAY, OCTOBER 29, 2014

#### 8:30-10:00AM

PLENARY SESSION V: EARLY-LIFE STRESSES AND LATE-LIFE DISEASE GRAND BALLROOM, SALON A

Session Chairs: Emily Oken, MD, MPH, Harvard Medical School (US) and Alvaro Puga, PhD. University of Cincinnati (US)

Transgenerational effects on cardiac development in zebra 8:35AM

fish - Warren Heideman, PhD, University of Wisconsin-

8:55AM Developmental origins of cardiovascular disease - Johan G.

Eriksson, MD, DMSc, University of Helsinki (Finland)

Early-life stresses and schizophrenia risk - Ezra S. Susser, MD. 9:15AM

DrPH, MPH, Columbia University Mailman School of Public

Health (US)

Prenatal and childhood adversity and inflammation in 9:35AM

adulthood - Natalie Slopen, University of Maryland College

Park (US)

9:50AM Moderated Panel Q&A

#### 10:00-10:30AM Break

# 10:30AM-12:00PM

10:55AM

PLENARY SESSION VI – DEVELOPING A GLOBAL **DEFINITION OF DOHAD** GRAND BALLROOM, SALON A

Session Chairs: John M. Balbus, MD, MPH, NIEHS/NIH (US) and Elizabet

Paunovic, MD, World Health Organization (Germany) 10:35AM

Role of environmental chemical exposures - Linda S.

Birnbaum, PhD, DABT, ATS, NIEHS/NTP/NIH (US) Role of nutrition - Matthew W. Gillman, MD, Harvard

Medical School (US)

11:15AM Role of stress - Deborah A. Cory-Slechta, PhD, University of

Rochester Medical Center (US)

11:35AM Integration of "environment" into DOHaD definition - Jerrold J.

Heindel, PhD, NIEHS/NIH (US)

11:50AM Moderated Panel Q&A

#### 12:00-1:30PM Lunch in Grand Ballroom, Salon G

A plated lunch will be served to registrants in the Grand Ballroom, Salon G.

1:30-3:00PM

PLENARY SESSION VII: TRANSLATING SCIENCE TO IMPROVE PUBLIC HEALTH GRAND BALLROOM, SALON A

Session Chairs: Philip J. Landrigan, MD, MSc, FAAP, Icahn School of Medicine, Mount Sinai (US) and Gwen Collman, PhD, NIEHS/NIH (US) 1:35PM

The precautionary principle in action - Hans Bruyninckx, PhD, European Environment Agency (Denmark)

1:55PM The clinician's role in protecting early development - Jeanne A.

Conry, MD, PhD, The Permanente Medical Group (US)

2:15PM Translating ecological effects to protection of human health -Louis J. Guillette Jr., PhD, Medical University of South

Carolina (US)

2:35PM Incorporation of principles from research on early life exposure

and effects into analysis for environmental health policies: Case studies from the US - Amy D. Kyle, PhD, MPH,

University of California-Berkeley (US)

2:50PM Moderated Panel Q&A

#### 3:00-3:30PM **Break**

#### 3:30-5:00PM

PLENARY SESSION VIII: DEVELOPING A GLOBAL DOHAD NETWORK GRAND BALLROOM, SALON A

Session Chairs: Claudia L. Thompson, PhD, NIEHS/NIH (US) and Emiko

Todaka, PhD, World Health Organization (Japan)

3:35PM DOHaD Society efforts to build a global DOHaD network -Mark A. Hanson, PhD, University of Southampton (US)

3:55PM Creating a DoHAD global network: Using other networks as a

model - William Suk, PhD, MPH, NIEHS/NIH (US)

4:15PM Integration of DOHaD concepts in WHO global health efforts -

Marie-Noel Bruné Drisse, MSc, World Health Organization

(Switzerland)

4:35PM Comments on developing a DOHaD network and panel

> discussion - Philippe Grandjean, MD, DMSc, University of Southern Denmark/Harvard School of Public Health, Peter D. Sly, MBBS, MD, FRACP, DSc, FThorSoc, The University of Queensland (Australia), and Argelia Castaño, PhD, Instituto

de Salud Carlos III

#### 5:00-5:30PM

5:10PM

**CLOSING REMARKS** 

#### GRAND BALLROOM, SALON A

5:00PM The PPTOX IV conference statement

Philippe Grandjean, MD, DMSc, University of Southern

Denmark/Harvard School of Public Health Future directions and meeting summary

Jerrold J. Heindel, PhD, NIEHS/NIH (US)

5:20PM The future of PPTOX



# **BOSTON LONG WHARF DIRECTIONS & FLOOR PLAN**

## Environmental Stressors in Disease and Implications for Human Health

October 26 - 29, 2014 | Boston Marriott Long Wharf Hotel, Boston, MA

296 State Street, Boston, Massachusetts 02109

Phone: +1.617.227.0800

#### AREA AIRPORTS

Aquarium.

#### **BOSTON LOGAN INTERNATIONAL AIRPORT - BOS**

Airport Phone: 1 800 235 6426 Hotel direction: 3.4 miles W
From Northbound Interstate 93: Take exit 23, Government Center
From Southbound Interstate 93, take exit 24A, Government Center/Aquarium. For each: Follow signs to the Aquarium. Hotel is located on the water, next to the

#### This hotel does not provide shuttle service.

- Alt transport: City Water Taxi; fee: 10 USD (one way) ;on request
- Subway service, fee: 2 USD (one way)
- Estimated taxi fare: 30 USD (one way)

#### T F GREEN AIRPORT - PVD

Airport Phone: 1 401 691 2471 Hotel direction: 59.9 miles NE Take I-95 North to I-93 North. Take Exit 23, Government Center/Aquarium. Follow signs for the Aquarium. Hotel is located on the water next to the Aquarium.

#### This hotel does not provide shuttle service.

- Alt transport: Peter Pan Bus Lines: 8 USD (one way) ;on request
- Estimated taxi fare: 150 USD (one way)

#### **PARKING**

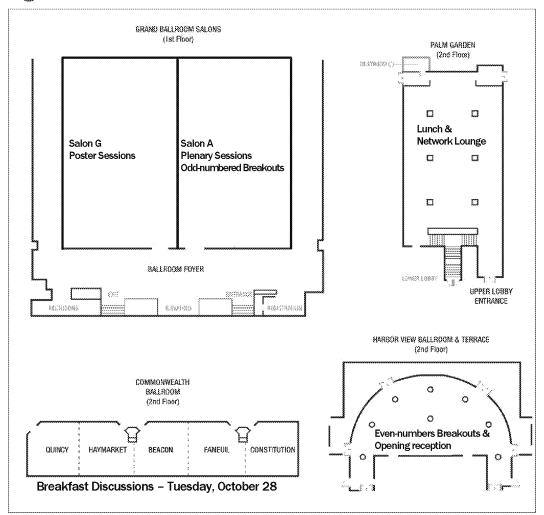
- ▶ Valet parking, fee: 48 USD daily
- Off-site parking, fee: 35 USD daily
- Hotel onsite parking is valet only

#### OTHER TRANSPORTATION

BUS STATION - South Station 2.1 miles SW SUBWAY STATION - Aquarium Subway Sta. 0.1 miles W TRAIN STATION

North Station 0.8 miles NW South Station 0.7 miles SW

## **Boston Long Wharf Marriott Floor Plan**





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# POSTERS - BY CATEGORY

PRESENTING AUTHOR	(#/\\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ABSTRACT TITLE	###-##
Keiko Nohara, PhD	Cancer	Search for the signaling pathways involved in the hepatic tumor increase in the F2 male C3H mice born to gestationally arsenite-exposed F0 females	TUES-1
Pheruza Tarapore, PhD	Cancer	Centrosome amplification in prostate cells induced by bisphenol A and its analogues	TUES-2
Vinicius Carreira, DVM, DACVP	Cardiovascular System	Cardiomyocyte-specific ablation of the aryl hydrocarbon receptor rescues the Nkx2-5 haploinsufficiency cardiac phenotype	MON-1
Leda Chatzi	Cardiovascular System	Association of prenatal exposure to persistent organic pollutants with cardiometabolic traits in early childhood	MON-2
Kirtan Kaur, BS	Cardiovascular System	Assessing fetal size and cardiac function using ultrasound biomicroscopy- echocardiography after maternal inhalation exposure to PM2.5 in mice	MON-5
Susan L Whittemore, PhD	Cardiovascular System	Early PAH Exposure Impacts Cardiac Function in Xenopus laevis	MON-3
Changcheng Zhou, PhD	Cardiovascular System	Bisphenol A Increases Atherosclerosis Mediated by the Human PXR	MON-4
Christine Dalgård, PhD, MSc	Diabetes & Metabolism	Low prenatal vitamin D exposure associated with increased risk of prediabetes in Faroese adolescents	TUES-5
Joshua F Gilens, BS	Diabetes & Metabolism	Effects of Developmental Exposure to Nonylphenol and alpha-Zearalenol on Adult Energy and Glucose Homeostasis	TUES-3
Vasantha Padmanabhan	Diabetes & Metabolism	Impact of gestational bisphenol A on oxidative stress and free fatty acids- a multispecies study	TUES-6
Nathaniel W Snyder, PhD, MPH	Diabetes & Metabolism	High sensitivity detection of exogenous and endogenous analytes by electron capture atmospheric pressure chemical ionization mass spectrometry	TUES-4
Alexander Suvorov, PhD	Diabetes & Metabolism	Developmental Exposure to PBDE and Metabolism Reprograming via mTOR Pathway	TUES-7
Xiaobin Wang, MD, MPH, ScD	Diabetes & Metabolism	Early Life Exposure to Metals and Precursors of Diabetes: A Prospective Birth Cohort Study	TUES-8
Rebecca N Bauer, PhD	Immune System	In Utero Arsenic and Cadmium Exposure is Associated with Altered T lymphocyte Populations in Infant Cord Blood	MON-6
Lisbeth Boule, MS	Immune System	Developmental activation of the AHR leads to context dependent changes in CD4+T cell responses later in life	MON-7
Hyunok Choi	Immune System	Airborne Benzo[a]pyrene, Lipid Peroxidation and Risk of Comorbid Condition of Asthma and Obesity in Children	MON-8
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Philippe Grandjean	Immune System	Immunotoxic impact at age 7 years of current and long-term childhood exposure to perflourinated compounds	MON-13
Thorhallur I Halldorsson	Immune System	Maternal concentrations of persistent organochlorine pollutants and airway obstruction in the offspring at 20 years of age	MON-14
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Margaret R Karagas, PhD	Immune System	Early childhood infections and symptoms of allergy and atopy in relation to in utero arsenic exposure in a US pregnancy cohort	MON-16
Jessica L. Meyers, BS	Immune System	Persistent changes in dendritic cell function following developmental activation of the aryl hydrocarbon receptor	MON-10
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Everett R Tate, BA	Immune System	Placental health is affected by Aryl hydrocarbon receptor-dependent regulation of metabolic and oxidative pathways.	MON-12
Amalie Timmermann, MSc	Immune System	Association between children's exposure to perfluorinated compounds and an asthma risk modified by MMR vaccination	MON-17
Masakazu Umezawa, PhD	Immune System	Effect of maternal exposure to carbon black nanoparticle during early gestation on the thymus and spleen of neonatal mouse	MON-18
Helle R Andersen	Nervous System	Occupational pesticide exposure in early pregnancy associated with sex-specific neurobehavioral deficits in the children at school age	MON-35
Ann Z. Bauer, MS	Nervous System	Paracetamol/Acetaminophen Exposure and Autism Spectrum Disorder-An Epigenetic Link?	MON-19
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Stephan Boeseoreilly	Nervous System	Inorganic mercury as a potential neurodevelopmental toxin - exposure of breast fed infants in a small-scale gold mining area in Zimbabwe	MON-36
Ana Boischio	Nervous System	Methylmercury burden of disease estimate among riverside populations in the Amazon: health program development with the Minamata convention	TUES-9
Jadyn Bravo	Nervous System	The role of prenatal exposures in modulation of neurodevelopment using the SHANK3e4-9/+ mutant mouse model	MON-21
Mary C Catanese	Nervous System	Beyond a means of exposure: an integrated view of maternal behavior and brain for toxicology research	MON-22
Cecile Chevrier	Nervous System	Prenatal exposure to organic solvents and neurocognitive performance in 6-year-old children	TUES-10
Anna L Choi, ScD	Nervous System	Developmental Fluoride Neurotoxicity in Chinese Children	TUES-11
Anna L Choi, ScD	Nervous System	Negative Confounding in Developmental Toxicity from Seafood Contaminants	TUES-12
Stephanie Donauer, PhD, MS	Nervous System	An observational study measuring the impact of low-level gestational exposure to organophosphate pesticides on cognition during early childhood	MON-23
Vimi Dookhun, MSc	Nervous System	Assessing environmental risk associated with mercury in Mauritius	MON-24
Lilah Glazer, PhD	Nervous System	Delayed effects of embryonic exposure to low levels of PCB-126 on adult zebrafish behavior	MON-25
Wojciech Hanke, MD, PhD	Nervous System	Effect of phthalate exposure on pregnancy duration, birth outcomes and child neurodevelopment	TUES-13
Maria H Harris, SM	Nervous System	Prenatal Exposure to Polyfluoroalkyl Chemicals and Childhood Cognition	TUES-14
Marissa Hauptman, MD, MPH	Nervous System	Risk of Subsequent Maltreatment in Infants with Neonatal Abstinence Syndrome	TUES-26



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PRESENTING AUTHOR	ल्ड <b>ब्रह्म स्टा</b> टाइड	ABSTRACT TITLE	444.44
Jordi Julvez	Nervous System	Prenatal methylmercury exposure and genetic predisposition to cognitive deficit at age 8 years: Study II	TUES-15
Jordi Julvez, PhD	Nervous System	Maternal intakes of seafood types and child neurodevelopment. A longitudinal study based on a population with high consumption levels	TUES-16
Shotaro Kawazoe	Nervous System	Effects of prenatal exposure to titanium dioxide nanoparticle on DNA methylation and gene expression profile in the brain of mouse	MON-26
Byungmi Kim	Nervous System	Selenium altered the reproductive and developmental neurotoxicity of mercury: MOCEH (MOthers and Childrens' Environmental Health) study	MON-27
Jinyoung Lee, MPH	Nervous System	Sex-specific expression patterns of genes associated with Alzheimer's disease during normal aging and with a developmental lead exposure in zebrafish	MON-28
Edward D Levin, PhD	Nervous System	Long-term Behavioral Dysfunction Caused by Early Developmental Exposure to Low Dose Tobacco Smoke Extract or Nicotine in Rats	TUES-17
Maitreyi Mazumdar,MD,MPH, MS	Nervous System	Environmental arsenic exposure is associated with reduced protective effect of folic acid in neural tube defect prevention	TUES-18
Ana Maria Mora, MD, PhD	Nervous System	Prenatal exposure to manganese and neurodevelopment at 12 months of age in the ISA study	MON-29
Alison G Paquette	Nervous System	Placental epigenetic patterning of cortisol response genes is associated with infant neurodevelopmental outcomes and maternal environment	MON-30
Zana Percy	Nervous System	Gestational Exposure to Phthalates and Gender-Related Play Behaviors in Typically Developing 7.5-9 Year Old Children	MON-31
Kayla M Quinnies	Nervous System	Dose-response tudy of di-(2ethylhexyl) phthalate (DEHP): androgenic and anti-androgenic actions	MON-32
Virginia A Rauh, ScD	Nervous System	Air pollution, emotional dysregulation and risk of social impairment in adolescence	TUES-19
Laura Ricceri	Nervous System	Prenatal exposure to the organophosphate chlorpyrifos delays motor development in the BTBR inbred strain, a mouse model of autism	TUES-25
Michael J Rudy, BS, MS	Nervous System	Embryonic iron deficiency alters adult neural structure	MON-33
Dave Saint-Amour	Nervous System	Postnatal exposure to PBDEs and visual processing in school-aged children in Nunavik	TUES-20
Marin Strøm, MSc, PhD	Nervous System	POPs measured in maternal serum and IQ of male offspring at conscription at 18-24 years of age	TUES-21
Larissa Takser, MD, PhD	Nervous System	Common plastifyers and the developing brain: links to thyroid disruption, nutrition, attention deficit/hyperactivity and autism	TUES-22
Majorie BM van Duursen, PhD	Nervous System	Neuronal differentiation and epigenetic modulation of the androgen receptor in vitro	TUES-23
Sara E Wirbisky	Nervous System	Developmental origins of neurotransmitter and transcriptome alterations in adult female zebrafish exposed to atrazine during embryogenesis	MON-34
Kimberly Yolton	Nervous System	Using Early Infant Neurobehavioral Assessment to Assess Impact of Gestational Exposure to Environmental Toxicants	TUES-24
Ana Maria Mora, MD, PhD	Obesity	Prenatal exposure to polyfluorcalkyl chemicals (PFCs) and childhood obesity in Project Viva	TUES-27
Sylvie Remy	Obesity	Neonatal gene expression: Marks of prenatal exposure to PFOA, PFOS, PCB153, and DDE	TUES-28
Damaskini (Dania) Valvi, MD, MPH	Obesity	In Utero Exposure to Phthalates and Childhood Growth and Blood Pressure	TUES-29
Maribel Casas, PhD	Other: Child health	The correlation structure of the Pregnancy Exposome: multiple environmental exposures in the INMA-Sabadell Birth Cohort	TUES-30
Rebecca M Nachman, PhD, MPH	Other: Endocrine Disrupting Compounds	Bisphenol A Exposure and Metabolism in Healthy Full-Term Neonates in Baltimore, Maryland	MON-37
Peter Y Bai, BSc, MSc	Other: Endocrine Disruptive Chemicals	The association of socio-demographic status, lifestyle factors and dietary patterns with total urinary phthalates in Australian men	MON-38
Caterina Vacchi-Suzzi	Other: Environmental Exposure	Temporal variability of cadmium in urine of prospective parents from the HOPE Study (UT)	MON-39
Flemming Nielsen, MSc, PhD	Other: Environmental toxicants	Distribution of perfluorinated compounds in blood compartments during prenatal exposure	MON-40
Andres Cardenas	Other: Epigenetics	In Utero Arsenic Exposure and Epigenome-Wide Association in Placenta, Artery and HUVEC	MON-41
Katherine E King, PhD, MA	Other: epigenetics	Air Pollutants Predict both DNA Methylation of Fetal Growth Genes and Birth Outcomes	MON-42
Karin B. Michels, ScD, PhD	Other: Epigenetics	Sexually Dimorphic Influence of Phthalates and Phenols on the Regulation of Genes Implicated in Neurodevelopment and Metabolism in Human Placenta	MON-43
Stephan Bose-O'Reilly	Other: Exposome research	From chromosome to exposome - the HEALS approach to health and environment-wide associations	MON-44
Courtney Carignan, PhD	Other: Exposure	Contribution of breast milk, formula and rice cereal intake to arsenic exposure in U.S. infants	TUES-31
Cheryl R Stein	Other: exposure	Determinants of Hair Metal Concentrations in Children Aged 6 – 12	TUES-32
Kristina Mattsson, MSc	Other: Exposure assessment	Cotinine validation of self-reported smoking during pregnancy in the Swedish Medical Birth Register	TUES-33
Ami R Zota, ScD, MS	Other: Exposure Assessment	Fetal accumulation and metabolism of PBDE flame retardants during second trimester of pregnancy	TUES-34
Jónrit Halling, MSc, PhD	Other: Exposure assessment in specific	Time trends in serum concentrations of perfluorinated compounds (PFC) in the Farcese population	TUES-35
Chisato Mori, MD, PhD	populations Other: Exposure	An attempt of development of PCBs exposure assessment using food frequency questionnaire in birth cohorts in Japan	TUES-36
Yuet-Kin Leung	assessments Other: Exposure	DNA methylation in umbilical cord blood as surrogate makers for prenatal exposure of HCB and PCB138	TUES-37
Maya Kappil	biomarkers Other: Fetal development	Disruption of the placental imprintome is associated with birth weight	TUES-38
Samantha L Kingsley, MPH	Other: Fetal growth	Proximity to major roadways and DNA methylation of repetitive elements in human placenta	TUES-39
Shohreh F Farzan, PhD	Other: inflammation	Association between maternal urinary arsenic and infant cord blood inflammatory marker levels in New Hampshire	MON-45
	Other: Influence of	Association between maternal unitary area it and manifector blood initial initiatory marker revers innerwinating mile.  Soil Milieu as a Reservoir of Environmental Stressors that influence Clinical Health, Human Diseases, and	
Howard Walter Mielke	Environment	Preedampsia/Edampsia	MON-46
Lucia Speroni	Other: Mammary gland	Fetal mammary gland development in a dish: observing the effects of BPA ex vivo	TUES-40



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Deepti Sood	Other: Metabolomics	Exploring metabolic effects of prenatal POP exposure using metabolomics	TUES-41
Rebekah Kennedy	Other: Microbiota	Trichlorocarbanilide Exposure during Early Life Induces the Overgrowth of Clostridium difficile in Rat Offspring Cecum Contents	TUES-42
Christopher Kassotis	Other: Mixture Effects	Endocrine Disrupting Activity of Hydraulic Fracturing Chemicals and Health Outcomes Following Prenatal Exposure in Mice	MON-47
Thomas F Webster, DSc	Other: Mixtures of endocrine disruptors	Biological effects of mixtures of endocrine disruptors: The "synergy" of new developments in toxicology, epidemiology and exposure science	MON-48
Jerrold J Heindel, PhD	Other: multi disease	Systematic Analysis of the Strength of the Association between Developmental Exposures to Environmental Chemicals and Later Life Disease/Dysfunctions	TUES-43
Rebecca Dzubow, MPH, MEM	Other: multiple endpoints	Interindividual Variability of Dose-Response in Human Developmental Studies: A Systematic Search and Lessons Learned	TUES-44
Lynne C Messer, PhD, MPH	Other: multiple health outcomes	Developmental programming as a propagator of intergenerational health disparities	TUES-45
Reiko Kishi, MD, PhD, MPH	Other: multiple outcomes	Perinatal PFAAs exposure cause various health outcomes on offspring including effects on reproductive and thyroid hormone; the Hokkaido study	TUES-46
David Cantonwine	Other: placental dysfunction	Endocrine disrupting chemical exposure during pregnancy and risk of preeclampsia	TUES-47
Carl F. Cranor, PhD, MSL	Óther: Policy research/public health	Dimensions of Injustice in the Developmental Origins of Disease	MON-49
Eun Hee Ha	Other: Pregnancy outcomes	The effect of prenatal exposure to Perfluorinated compounds on adverse birth weight by GSTT1, GSTM1, and CYP1A1 genetic polymorphism	TUES-48
Susan Makris	Other: Regulatory	Are Standard Testing Guidelines Adequate to Screen Chemicals for Prenatal Programming of Toxicological Response?	MON-50
Sasha Adkins, MPH	Other: Risk perception	Perceptions of risk of in utero exposure to bisphenol-A	MON-51
Syed Moshfiqur Rahman	Other: Toxicology and Child Health	Effects of early life manganese exposure through drinking water on child growth and development	TUES-49
Mark Miller, MD, MPH		Story of Health multi-media eBook – Using storytelling to translate science for health promotion and disease prevention	TUES-50
Nicole Acevedo, MS, PhD	Reproductive System	Perinatal exposure to environmentally relevant levels of bisphenol decreases reproductive success by affecting multiple targets	MON-52
Jennifer J Adibi, MPH, ScD	Reproductive System	Talgers  Placental human chorionic gonadotropin is associated with sex-specific development and the response to the endocrine disruptor mono-n-butyl phthalate.	MON-53
Michal Adir	Reproductive System	Phthalate Metabolite Levels in Follicular Fluid among Fertile and Infertile Women	MON-54
Jason L. Blum, PhD	Reproductive System	Inhalation of concentrated ambient particulate matter by pregnant mice leads to adverse obstetric outcomes associated with particular exposure windows	TUES-64
Carrie Breton, ScD, MPH	Reproductive System	Prenatal traffic-related air pollution influences miRNA expression in sorted cord blood	TUES-52
Maribel Casas, PhD	Reproductive System	Maternal occupational exposure to Endocrine Disrupting Chemicals across Europe and Birth Outcomes	MON-55
Maribel Casas, PhD	Reproductive System	Exposure to Bisphenol A and Phthalates during Pregnancy and Fetal Growth	MON-56
Christine Dobson	Reproductive System	Associations of cord blood cadmium with placental gene expression & fetal growth indices in a Bangladesh birth cohort	MON-58
Christine Dobson, SD	Reproductive System	Cord blood cadmium and fetal growth indices in a Bangladesh birth cohort	MON-57
Albert Donnay	Reproductive System	High odds ratios for hyperemesis gravidarum associated with exposure to carbon monoxide sources and multi-sensory sensitivity during pregnancy	MON-65
Rebecca Dzubow, MPH, MEM	Reproductive System	Biomonitoring Trends in Women of Child-Bearing Age and Potential Prenatal Programming Effects, from EPA's America's Children and the Environment	TUES-51
Jennifer A Emond, PhD	Reproductive System	The influence of arsenic exposure on infant birth size by maternal weight status among a sample of women in the Northeastern United States.	MON-59
Kelly Ferguson	Reproductive System	Urinary phthalate metabolites and bisphenol-A in association with circulating biomarkers of placental function across pregnancy	TUES-53
Jennifer L Freeman, PhD	Reproductive System	A developmental origin of adult reproductive dysfunction in the zebrafish associated with an embryonic exposure to the herbicide atrazine.	TUES-54
Thorhallur Ingi Halldorsson, PhD	Reproductive System	Does variation in fetal growth rate affect maternal concentrations of perfluoroalkyl acids during pregnancy?	MON-60
Molly Kile	Reproductive System	Using structural equation models to examine the association between prenatal arsenic exposure, maternal health, and birth weight	TUES-55
Birgitte Lindeman, PhD	Reproductive System	Diet-induced obesity increases the spermatozoal toxicity of acrylamide in the absence of oxidative stress	TUES-56
Anderson J Martino-Andrade	Reproductive System	Manipulation of pre- and postnatal androgen environments and male anogenital distance in rats	MON-61
Maria Skaalum Petersen, MSc, PhD	Reproductive System	Spermatogenic capacity in fertile men with high exposure to polychlorinated biphenyls	MON-62
Rick Pilsner, PhD, MPH	Reproductive System	Rapid Method of Sperm DNA Extraction for Epigenetic and Genetic Studies	TUES-57
Anna Z Pollack, PhD, MPH	Reproductive System	Urinary paraben exposure, reproducibility, and reproductive hormones in premenopausal women	MON-63
Christy Porucznik, PhD, MSPH	Reproductive System	The Home Observation of Periconceptional Exposures (HOPE) Study—a Prospective, Pre-conception Cohort	TUES-58
Tracy Punshon, PhD	Reproductive System	Placental arsenic concentrations in relation to both maternal and infant biomarkers of exposure in a US cohort	TUES-59
Pheruza Tarapore, PhD	Reproductive System	High fat olive oil, not butter, has a protective role in bisphenol A-induced impaired spermatogenesis	TUES-60
Hanna M Vesterinen, PhD	Reproductive System	Fetal growth and maternal glomerular filtration rate: a systematic review	TUES-61
Deborah Watkins, PhD, MPH	Reproductive System	Associations between urinary phenol and paraben concentrations and markers of oxidative stress and inflammation among pregnant women in Puerto Rico	TUES-62
Abby G Wenzel, BS, MS	Reproductive System	Assessing the prevalence of phthalate metabolites in a population of pregnant women	MON-64
Marya G. Zlatnik, MD, MMS	Reproductive System	Reproductive Environmental Health Education for OB/GYN Specialists	TUES-63
Caroline Serrano-Nascimento	Thyroid	Maternal exposure to iodine excess throughout pregnancy & lactation induces hypothyroidism in adult male rat offspring	TUES-65



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# POSTERS - BY POSTER NUMBER

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Stephan Bose-O'Reilly	Other: Exposome research	From chromosome to exposome - the HEALS approach to health and environment-wide associations	MON-44
Shohreh F Farzan, PhD	Other: inflammation	Association between maternal urinary arsenic and infant cord blood inflammatory marker levels in New Hampshire	MON-45
Howard Walter Mielke	Other: Influence of Environment	Soil Millieu as a Reservoir of Environmental Stressors that influence Clinical Health, Human Diseases, and Preeclampsia/Eclampsia	MON-46
Christopher Kassotis	Other: Mixture Effects	Endocrine Disrupting Activity of Hydraulic Fracturing Chemicals and Health Outcomes Following Prenatal Exposure in Mice	MON-47
Thomas F Webster, DSc	Other: Mixtures of endocrine disruptors	Biological effects of mixtures of endocrine disruptors: The "synergy" of new developments in toxicology, epidemiology and exposure science	MON-48
Carl F. Cranor, PhD, MSL	Other: Policy research/public health	Dimensions of Injustice in the Developmental Origins of Disease	MON-49
Susan Makris	Other: Regulatory	Are Standard Testing Guidelines Adequate to Screen Chemicals for Prenatal Programming of Toxicological Response?	MON-50
Sasha Adkins, MPH	Other: Risk perception	Perceptions of risk of in utero exposure to bisphenol-A	MON-51
Nicole Acevedo, MS, PhD	Reproductive System	Perinatal exposure to environmentally relevant levels of bisphenol decreases reproductive success by affecting multiple targets	MON-52
Jennifer J Adibi, MPH, ScD	Reproductive System	Placental human chorionic gonadotropin is associated with sex-specific development and the response to the endocrine disruptor mono-n-butyl phthalate.	MON-53
Michal Adir	Reproductive System	Phthalate Metabolite Levels in Follicular Fluid among Fertile and Infertile Women	MON-54
Maribel Casas, PhD	Reproductive System	Maternal occupational exposure to Endocrine Disrupting Chemicals across Europe and Birth Outcomes	MON-55
Maribel Casas, PhD	Reproductive System	Exposure to Bisphenol A and Phthalates during Pregnancy and Fetal Growth	MON-56
Christine Dobson, SD	Reproductive System	Cord blood cadmium and fetal growth indices in a Bangladesh birth cohort	MON-57
Christine Dobson	Reproductive System	Associations of cord blood cadmium with placental gene expression & fetal growth indices in a Bangladesh birth cohort	MON-58
Jennifer A Emond, PhD	Reproductive System	The influence of arsenic exposure on infant birth size by maternal weight status among a sample of women in the Northeastern United States	MON-59
Rebecca N Bauer, PhD	Immune System	In Utero Arsenic and Cadmium Exposure is Associated with Altered T lymphocyte Populations in Infant Cord Blood	MON-6
Thorhallur Ingi Halldorsson, PhD	Reproductive System	Does variation in fetal growth rate affect maternal concentrations of perfluoroalkyl acids during pregnancy?	MON-60
Anderson J Martino-Andrade	Reproductive System	Manipulation of pre- and postnatal androgen environments and male anogenital distance in rats	MON-61
Maria Skaalum Petersen, MSc, PhD	Reproductive System	Spermatogenic capacity in fertile men with high exposure to polychlorinated biphenyls	MON-62
Anna Z Pollack, PhD, MPH	Reproductive System	Urinary paraben exposure, reproducibility, and reproductive hormones in premenopausal women	MON-63
Abby G Wenzel, BS, MS	Reproductive System	Assessing the prevalence of phthalate metabolites in a population of pregnant women	MON-64
Albert Donnay	Reproductive System	High odds ratios for hyperemesis gravidarum associated with exposure to carbon monoxide sources and multi-sensory sensitivity during pregnancy	MON-65
Keiko Nohara, PhD	Cancer	Search for the signaling pathways involved in the hepatic tumor increase in the F2 male C3H mice born to gestationally arsenite-exposed F0 females	TUES-1
Pheruza Tarapore, PhD	Cancer	Centrosome amplification in prostate cells induced by bisphenol A and its analogues	TUES-2
Joshua F Gilens, BS	Diabetes & Metabolism	Effects of Developmental Exposure to Nonylphenol and alpha-Zearalenol on Adult Energy and Glucose Homeostasis	TUES-3
Nathaniel W Snyder, PhD, MPH	Diabetes & Metabolism	High sensitivity detection of exogenous and endogenous analytes by electron capture atmospheric pressure chemical ionization mass spectrometry	TUES-4
Christine Dalgård, PhD, MSc	Diabetes & Metabolism	Low prenatal vitamin D exposure associated with increased risk of prediabetes in Faroese adolescents	TUES-5
Vasantha Padmanabhan	Diabetes & Metabolism	Impact of gestational bisphenol A on oxidative stress and free fatty acids- a multispecies study	TUES-6
Alexander Suvorov, PhD	Diabetes & Metabolism	Developmental Exposure to PBDE and Metabolism Reprograming via mTOR Pathway	TUES-7
Xiaobin Wang, MD, MPH, ScD	Diabetes & Metabolism	Early Life Exposure to Metals and Precursors of Diabetes: A Prospective Birth Cohort Study	TUES-8
Ana Boischio	Nervous System	Methylmercury burden of disease estimate among riverside populations in the Amazon: health program development with the Minamata convention	TUES-9
Cecile Chevrier	Nervous System	Prenatal exposure to organic solvents and neurocognitive performance in 6-year-old children	TUES-10
Anna L Choi, ScD	Nervous System	Developmental Fluoride Neurotoxicity in Chinese Children	TUES-11
Anna L Choi, ScD	Nervous System	Negative Confounding in Developmental Toxicity from Seafood Contaminants	TUES-12
Wojciech Hanke, MD, PhD	Nervous System	Effect of phthalate exposure on pregnancy duration, birth outcomes and child neurodevelopment	TUES-13
Maria H Harris, SM	Nervous System	Prenatal Exposure to Polyfluoroalkyl Chemicals and Childhood Cognition	TUES-14
Jordi Julvez	Nervous System	Prenatal methylmercury exposure and genetic predisposition to cognitive deficit at age 8 years: Study II	TUES-15
Jordi Julvez, PhD	Nervous System	Maternal intakes of seafood types and child neurodevelopment: A longitudinal study based on a population with high consumption levels	TUES-16
Edward D Levin, PhD	Nervous System	Long-term Behavioral Dysfunction Caused by Early Developmental Exposure to Low Dose Tobacco Smoke Extract or Nicotine in Rats	TUES-17
Maitreyi Mazumdar,MD,MPH, MS	Nervous System	Environmental arsenic exposure is associated with reduced protective effect of folic acid in neural tube defect prevention	TUES-18
Virginia A Rauh, ScD	Nervous System	Air pollution, emotional dysregulation and risk of social impairment in adolescence	TUES-19
Dave Saint-Amour	Nervous System	Postnatal exposure to PBDEs and visual processing in school-aged children in Nunavik	TUES-20
Marin Strøm, MSc, PhD	Nervous System	POPs measured in maternal serum and IQ of male offspring at conscription at 18-24 years of age	TUES-21



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Marissa Hauptman, MD, MPH	Nervous System	Risk of Subsequent Maltreatment in Infants with Neonatal Abstinence Syndrome	TUES-26
Ana Maria Mora, MD, PhD	Obesity	Prenatal exposure to polyfluorcalkyl chemicals (PFCs) and childhood obesity in Project Viva	TUES-27
Sylvie Remy	Obesity	Neonatal gene expression: Marks of prenatal exposure to PFOA, PFOS, PCB153, and DDE	TUES-28
Damaskini (Dania) Valvi, MD, MPH	Obesity	In Utero Exposure to Phthalates and Childhood Growth and Blood Pressure	TUES-29
Maribel Casas, PhD	Other: Child health	The correlation structure of the Pregnancy Exposome: multiple environmental exposures in the INMA-Sabadell Birth Cohort	TUES-30
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Cheryl R Stein	Other: exposure	Determinants of Hair Metal Concentrations in Children Aged 6 – 12	TUES-32
Kristina Mattsson, MSc	Other: Exposure assessment	Cotinine validation of self-reported smoking during pregnancy in the Swedish Medical Birth Register	TUES-33
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Jónrit Halling, MSc, PhD	Other: Exposure assessment in specific populations	Time trends in serum concentrations of perfluorinated compounds (PFC) in the Farcese population	TUES-35
Chisato Mori, MD, PhD	Other: Exposure assessments	An attempt of development of PCBs exposure assessment using food frequency questionnaire in birth cohorts in Japan	TUES-36
Yuet-Kin Leung	Other: Exposure biomarkers	DNA methylation in umbilical cord blood as surrogate makers for prenatal exposure of HCB and PCB138	TUES-37
Maya Kappil	Other: Fetal development	Disruption of the placental imprintome is associated with birth weight	TUES-38
Samantha L Kingsley, MPH	Other: Fetal growth	Proximity to major roadways and DNA methylation of repetitive elements in human placenta	TUES-39
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Rebekah Kennedy	Other: Microbiota	Trichlorocarbanilide Exposure during Early Life Induces the Overgrowth of Clostridium difficile in Rat Offspring Cecum Contents	TUES-42
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Reiko Kishi, MD, PhD, MPH	Other: multiple outcomes	Perinatal PFAAs exposure cause various health outcomes on offspring including effects on reproductive and thyroid hormone; the Hokkaido study	TUES-46
David Cantonwine	Other: placental dysfunction	Endocrine disrupting chemical exposure during pregnancy and risk of preeclampsia	TUES-47
Eun Hee Ha	Other: Pregnancy outcomes	The effect of prenatal exposure to Perfluorinated compounds on adverse birth weight by GSTT1, GSTM1, and CYP1A1 genetic polymorphism	TUES-48
Syed Moshfiqur Rahman	Other: Toxicology and	Effects of early life manganese exposure through drinking water on child growth and development	TUES-49
Mark Miller, MD, MPH	Child Health Other: Translating science	Story of Health multi-media eBook – Using storytelling to translate science for health promotion and disease prevention	TUES-50
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Jennifer L Freeman, PhD	Reproductive System	pregnancy  A developmental origin of adult reproductive dysfunction in the zebrafish associated with an embryonic exposure to the	TUES-54
Molly Kile	Reproductive System	herbicide atrazine. Using structural equation models to examine the association between prenatal arsenic exposure, maternal health, and	TUES-55
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Rick Pilsner, PhD, MPH	Reproductive System	Rapid Method of Sperm DNA Extraction for Epigenetic and Genetic Studies	TUES-57
Christy Porucznik, PhD, MSPH	Reproductive System	The Home Observation of Periconceptional Exposures (HOPE) Study—a Prospective, Pre-conception Cohort	TUES-58
Tracy Punshon, PhD	Reproductive System	Placental arsenic concentrations in relation to both maternal and infant biomarkers of exposure in a US cohort	TUES-59
Pheruza Tarapore, PhD	Reproductive System	High fat olive oil, not butter, has a protective role in bisphenol A-induced impaired spermatogenesis	TUES-60
Hanna M Vesterinen, PhD	Reproductive System	Fetal growth and maternal glomerular filtration rate: a systematic review	TUES-61
Deborah Watkins, PhD, MPH	Reproductive System	Associations between urinary phenol and paraben concentrations and markers of oxidative stress and inflammation among pregnant women in Puerto Rico	TUES-62
Marya G. Zlatnik, MD, MMS	Reproductive System	Reproductive Environmental Health Education for OB/GYN Specialists	TUES-63
Jason L. Blum, PhD	Reproductive System	Inhalation of concentrated ambient particulate matter by pregnant mice leads to adverse obstetric outcomes associated	TUES-64
Caroline Serrano-Nascimento	Thyroid	with particular exposure windows  Maternal exposure to iodine excess throughout pregnancy & lactation induces hypothyroidism in adult male rat offspring	TUES-65



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Jennifer J Adibi, MPH, ScD	Reproductive System	Placental human chorionic gonadotropin is associated with sex-specific development and the response to the endocrine disruptor mono-n-butyl phthalate.	
Michal Adir	Reproductive System	Phthalate Metabolite Levels in Follicular Fluid among Fertile and Infertile Women	MON-54
Sasha Adkins, MPH	Other: Risk perception	Perceptions of risk of in utero exposure to bisphenol-A	
Helle R Andersen	Nervous System	Occupational pesticide exposure in early pregnancy associated with sex-specific neurobehavioral deficits in the children at school age	
Peter Y Bai, BSc, MSc	Other: Endocrine Disruptive Chemicals	at surforrage The association of socio-demographic status, lifestyle factors and detary patterns with total urinary phthalates in Australian men	
Ann Z. Bauer, MS	Nervous System	Paracetamol/Acetaminophen Exposure and Autism Spectrum Disorder-An Epigenetic Link?	MON-19
Ann Z Bauer, MS, BS	Nervous System	Is Paracetamol/Acetaminophen a causal factor in the Etiology of Autism Spectrum Disorder? A review and research synthesis.	MON-20
Rebecca N Bauer, PhD	Immune System	In Utero Arsenic and Cadmium Exposure is Associated with Altered T lymphocyte Populations in Infant Cord Blood	MON-6
Jason L. Blum, PhD	Reproductive System	Inhalation of concentrated ambient particulate matter by pregnant mice leads to adverse obstetric outcomes associated with particular exposure windows	TUES-64
Stephan Boeseoreilly	Nervous System	Inorganic mercury as a potential neurodevelopmental toxin - exposure of breast fed infants in a small-scale gold mining area in Zimbabwe	MON-36
Ana Boischio	Nervous System	Methylmercury burden of disease estimate among riverside populations in the Amazon: health program development with the Minamata convention	TUES-9
Stephan Bose-O'Reilly	Other: Exposome research	From chromosome to exposome - the HEALS approach to health and environment-wide associations	MON-44
Lisbeth Boule, MS	Immune System	Developmental activation of the AHR leads to context dependent changes in CD4+T cell responses later in life	MON-7
Jaclyn Bravo	Nervous System	The role of prenatal exposures in modulation of neurodevelopment using the SHANK3e4-9/+ mutant mouse model	MON-21
Carrie Breton, ScD, MPH	Reproductive System	Prenatal traffic-related air pollution influences miRNA expression in sorted cord blood	TUES-52
David Cantonwine	Other: placental dysfunction	Endocrine disrupting chemical exposure during pregnancy and risk of preeclampsia	TUES-47
Andres Cardenas	Other: Epigenetics	In Utero Arsenic Exposure and Epigenome-Wide Association in Placenta, Artery and HUVEC	MON-41
Courtney Carignan, PhD	Other: Exposure	Contribution of breast milk, formula and rice cereal intake to arsenic exposure in U.S. infants	TUES-31
Vinicius Carreira, DVM, DACVP	Cardiovascular System	Cardiomyocyte-specific ablation of the aryl hydrocarbon receptor rescues the Nkx2-5 haploinsufficiency cardiac phenotype	MON-1
Maribel Casas, PhD	Reproductive System	Maternal occupational exposure to Endocrine Disrupting Chemicals across Europe and Birth Outcomes	MON-55
Maribel Casas, PhD	Reproductive System	Exposure to Bisphenol A and Phthalates during Pregnancy and Fetal Growth	MON-56
Maribel Casas, PhD	Other: Child health	The correlation structure of the Pregnancy Exposome: multiple environmental exposures in the INMA-Sabadell Birth Cohort	TUES-30
Mary C Catanese	Nervous System	Beyond a means of exposure: an integrated view of maternal behavior and brain for toxicology research	MON-22
Leda Chatzi	Cardiovascular System	Association of prenatal exposure to persistent organic pollutants with cardiometabolic traits in early childhood	MON-2
Cecile Chevrier	Nervous System	Prenatal exposure to organic solvents and neurocognitive performance in 6-year-old children	TUES-10
Hyunok Choi	Immune System	Airborne Benzo[a]pyrene, Lipid Peroxidation and Risk of Comorbid Condition of Asthma and Obesity in Children	MON-8
Hyunok Choi	Immune System	Modification of Ambient Benzo[a]pyrene Effects on Childhood Asthma by Single Nucleotide Polymorphisms	MON-9
Anna L Choi, ScD	Nervous System	Developmental Fluoride Neurotoxicity in Chinese Children	TUES-11
Anna L Choi, ScD	Nervous System	Negative Confounding in Developmental Toxicity from Seafood Contaminants	TUES-12
Carl F. Cranor, PhD, MSL	Other: Policy research/public health	Dimensions of Injustice in the Developmental Origins of Disease	MON-49
Christine Dalgård, PhD, MSc	Diabetes & Metabolism	Low prenatal vitamin D exposure associated with increased risk of prediabetes in Faroese adolescents	TUES-5
Christine Dobson	Reproductive System	Associations of cord blood cadmium with placental gene expression & fetal growth indices in a Bangladesh birth cohort	MON-58
Christine Dobson, SD	Reproductive System	Cord blood cadmium and fetal growth indices in a Bangladesh birth cohort	MON-57
Stephanie Donauer, PhD, MS	Nervous System	An observational study measuring the impact of low-level gestational exposure to organophosphate pesticides on cognition during early childhood	MON-23
Albert Donnay	Reproductive System	High odds ratios for hyperemesis gravidarum associated with exposure to carbon monoxide sources and multi-sensory sensitivity during pregnancy	
Vimi Dookhun, MSc	Nervous System	Assessing environmental risk associated with mercury in Mauritius	
Rebecca Dzubow, MPH, MEM	Other: multiple endpoints	Interindividual Variability of Dose-Response in Human Developmental Studies: A Systematic Search and Lessons Learned	TUES-44
Rebecca Dzubow, MPH, MEM	Reproductive System	Ecamed Biomonitoring Trends in Women of Child-Bearing Age and Potential Prenatal Programming Effects, from EPA's America's Children and the Environment	TUES-51
Jennifer A Emond, PhD	Reproductive System	Anialica's Cilliderrand the Environment. The influence of arsenic exposure on infant birth size by maternal weight status among a sample of women in the Northeastern United States.	MON-59
Shohreh F Farzan, PhD	Other: inflammation	Association between maternal urinary arsenic and infant cord blood inflammatory marker levels in New Hampshire	MON-45



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Jennifer L Freeman, PhD	Reproductive System	A developmental origin of adult reproductive dysfunction in the zebrafish associated with an embryonic exposure to the herbicide atrazine.		
Joshua F Gilens, BS	Diabetes & Metabolism	Effects of Developmental Exposure to Nonylphenol and alpha-Zearalenol on Adult Energy and Glucose Homeostasis		
Lilah Glazer, PhD	Nervous System	Delayed effects of embryonic exposure to low levels of PCB-126 on adult zebrafish behavior		
Philippe Grandjean	Immune System	Immunotoxic impact at age 7 years of current and long-term childhood exposure to perflourinated compounds	MON-13	
Thorhallur Ingi Halldorsson, PhD	Reproductive System	Does variation in fetal growth rate affect maternal concentrations of perfluorcalkyl acids during pregnancy?	MON-60	
Thorhallur I Halldorsson	Immune System	Maternal concentrations of persistent organochlorine pollutants and airway obstruction in the offspring at 20 years of age	MON-14	
Jónrit Halling, MSc, PhD	Other: Exposure assessment in specific populations	Time trends in serum concentrations of perfluorinated compounds (PFC) in the Farcese population		
Wojciech Hanke, MD, PhD	Nervous System	Effect of phthalate exposure on pregnancy duration, birth outcomes and child neurodevelopment		
Maria H Harris, SM	Nervous System	Prenatal Exposure to Polyfluoroalkyl Chemicals and Childhood Cognition	TUES-14	
Marissa Hauptman, MD, MPH	Nervous System	Risk of Subsequent Maltreatment in Infants with Neonatal Abstinence Syndrome	TUES-26	
Eun Hee Ha	Other: Pregnancy outcomes	The effect of prenatal exposure to Perfluorinated compounds on adverse birth weight by GSTT1, GSTM1, and CYP1A1 genetic polymorphism	TUES-48	
carsten Heilmann, MD, DMSc	Immune System	Possible mechanism for perfluorinated compound-induced inhibition of antibody production in children: Reduction of NFKB activity and IKB degradation.	MON-15	
Jerrold J Heindel, PhD	Other: multi disease	Systematic Analysis of the Strength of the Association between Developmental Exposures to Environmental Chemicals and Later Life Disease/Dvsfunctions	TUES-43	
Jordi Julvez	Nervous System	Prenatal methylmercury exposure and genetic predisposition to cognitive deficit at age 8 years: Study II	TUES-15	
Jordi Julvez, PhD	Nervous System	Maternal intakes of seafood types and child neurodevelopment: A longitudinal study based on a population with high consumption levels	TUES-16	
Maya Kappil	Other: Fetal development	Disruption of the placental imprintome is associated with birth weight	TUES-38	
Margaret R Karagas, PhD	Immune System	Early childhood infections and symptoms of allergy and atopy in relation to in utero arsenic exposure in a US pregnancy cohort	MON-16	
Christopher Kassotis	Other: Mixture Effects	Endocrine Disrupting Activity of Hydraulic Fracturing Chemicals and Health Outcomes Following Prenatal Exposure in Mice	MON-47	
Kirtan Kaur, BS	Cardiovascular System	Assessing fetal size and cardiac function using ultrasound biomicroscopy- echocardiography after maternal inhalation exposure to PM2.5 in mice	MON-5	
Shotaro Kawazoe	Nervous System	Effects of prenatal exposure to titanium dioxide nanoparticle on DNA methylation and gene expression profile in the brain of mouse	MON-26	
Rebekah Kennedy	Other: Microbiota	Trichlorocarbanilide Exposure during Early Life Induces the Overgrowth of Clostridium difficile in Rat Offspring Cecum Contents	TUES-42	
Molly Kile	Reproductive System	Using structural equation models to examine the association between prenatal arsenic exposure, maternal health, and birth weight	TUES-55	
Byungmi Kim	Nervous System	Selenium altered the reproductive and developmental neurotoxicity of mercury : MOCEH (MOthers and Childrens' Environmental Health) study	MON-27	
Katherine E King, PhD, MA	Other: epigenetics	Air Pollutants Predict both DNA Methylation of Fetal Growth Genes and Birth Outcomes	MON-42	
Samantha L Kingsley, MPH	Other: Fetal growth	Proximity to major roadways and DNA methylation of repetitive elements in human placenta	TUES-39	
Reiko Kishi, MD, PhD, MPH	Other: multiple outcomes	Perinatal PFAAs exposure cause various health outcomes on offspring including effects on reproductive and thyroid hormone; the Hokkaido study	TUES-46	
Jinyoung Lee, MPH	Nervous System	Sex-specific expression patterns of genes associated with Alzheimer's disease during normal aging and with a developmental lead exposure in zebrafish	MON-28	
Yuet-Kin Leung	Other: Exposure biomarkers	DNA methylation in umbilical cord blood as surrogate makers for prenatal exposure of HCB and PCB138	TUES-37	
Edward D Levin, PhD	Nervous System	Long-term Behavioral Dysfunction Caused by Early Developmental Exposure to Low Dose Tobacco Smoke Extract or Nicotine in Rats	TUES-17	
Birgitte Lindeman, PhD	Reproductive System	Diet-induced obesity increases the spermatozoal toxicity of acrylamide in the absence of oxidative stress	TUES-56	
Susan Makris	Other: Regulatory	Are Standard Testing Guidelines Adequate to Screen Chemicals for Prenatal Programming of Toxicological Response?	MON-50	
Anderson J Martino-Andrade	Reproductive System	Manipulation of pre- and postnatal androgen environments and male anogenital distance in rats	MON-61	
Kristina Mattsson, MSc	Other: Exposure assessment	Cotinine validation of self-reported smoking during pregnancy in the Swedish Medical Birth Register	TUES-33	
Maitreyi Mazumdar,MD,MPH, MS		Environmental arsenic exposure is associated with reduced protective effect of folic acid in neural tube defect prevention	TUES-18	
Lynne C Messer, PhD, MPH	Other: multiple health outcomes	Developmental programming as a propagator of intergenerational health disparities	TUES-45	
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Howard Walter Mielke	Other: Influence of Environment	Soil Milieu as a Reservoir of Environmental Stressors that influence Clinical Health, Human Diseases, and Preeclampsia/Eclampsia	MON-46	
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Ana Maria Mora, MD, PhD	Nervous System	Prenatal exposure to manganese and neurodevelopment at 12 months of age in the ISA study	MON-29	
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Keiko Nohara, PhD	Cancer	Search for the signaling pathways involved in the hepatic tumor increase in the F2 male C3H mice born to gestationally arsenite-exposed F0 females	
Vasantha Padmanabhan	Diabetes & Metabolism	Impact of gestational bisphenol A on oxidative stress and free fatty acids- a multispecies study	
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Rick Pilsner, PhD, MPH	Reproductive System	Rapid Method of Sperm DNA Extraction for Epigenetic and Genetic Studies	
Anna Z Pollack, PhD, MPH	Reproductive System	Urinary paraben exposure, reproducibility, and reproductive hormones in premenopausal women	
Christy Porucznik, PhD, MSPH	Reproductive System	The Home Observation of Periconceptional Exposures (HOPE) Study—a Prospective, Pre-conception Cohort  Developmental exposure to 2,3,7,8,-tetrachlorodibenzo-p-dioxin (TCDD) has implications for multi- and transperierational effects on antiviral immunity	
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Tracy Punshon, PhD	Reproductive System	Placental arsenic concentrations in relation to both maternal and infant biomarkers of exposure in a US cohort	
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Syed Moshfiqur Rahman	Other: Toxicology and Child Health	Effects of early life manganese exposure through drinking water on child growth and development	TUES-49
Virginia A Rauh, ScD	Nervous System	Air pollution, emotional dysregulation and risk of social impairment in adolescence	TUES-19
Sylvie Remy	Obesity	Neonatal gene expression: Marks of prenatal exposure to PFOA, PFOS, PCB153, and DDE	TUES-28
Laura Ricceri	Nervous System	Prenatal exposure to the organophosphate chlorpyrifos delays motor development in the BTBR inbred strain, a mouse model of autism	TUES-25
Michael J Rudy, BS, MS	Nervous System	Embryonic iron deficiency alters adult neural structure	MON-33
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Nathaniel W Snyder, PhD, MPH	Diabetes & Metabolism	High sensitivity detection of exogenous and endogenous analytes by electron capture atmospheric pressure chemical ionization mass spectrometry	TUES-4
Deepti Sood	Other: Metabolomics	Exploring metabolic effects of prenatal POP exposure using metabolomics	TUES-41
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Marin Strøm, MSc, PhD	Nervous System	POPs measured in maternal serum and IQ of male offspring at conscription at 18-24 years of age	TUES-21
Alexander Suvorov, PhD	Diabetes & Metabolism	Developmental Exposure to PBDE and Metabolism Reprograming via mTOR Pathway	TUES-7
Larissa Takser, MD, PhD	Nervous System	Common plastifyers and the developing brain. links to thyroid disruption, nutrition, attention deficit/hyperactivity and autism	TUES-22
Pheruza Tarapore, PhD	Cancer	Centrosome amplification in prostate cells induced by bisphenol A and its analogues	
Pheruza Tarapore, PhD	Reproductive System	High fat olive oil, not butter, has a protective role in bisphenol A-induced impaired spermatogenesis	
Everett R Tate, BA	Immune System	Placental health is affected by Aryl hydrocarbon receptor-dependent regulation of metabolic and oxidative pathways.	MON-12
Amalie Timmermann, MSc	Immune System	Association between children's exposure to perfluorinated compounds and an asthma risk modified by MMR vaccination	MON-17
Masakazu Umezawa, PhD	Immune System	Effect of maternal exposure to carbon black nanoparticle during early gestation on the thymus and spleen of neonatal mouse	MON-18
Caterina Vacchi-Suzzi	Other: Environmental Exposure	Temporal variability of cadmium in urine of prospective parents from the HOPE Study (UT)	MON-39
Damaskini (Dania) Valvi, MD, MPH	Obesity	In Utero Exposure to Phthalates and Childhood Growth and Blood Pressure	TUES-29
Majorie BM van Duursen, PhD	Nervous System	Neuronal differentiation and epigenetic modulation of the androgen receptor in vitro	TUES-23
Hanna M Vesterinen, PhD	Reproductive System	Fetal growth and maternal glomerular filtration rate: a systematic review	TUES-61
Xiaobin Wang, MD, MPH, ScD	Diabetes & Metabolism	Early Life Exposure to Metals and Precursors of Diabetes: A Prospective Birth Cohort Study	TUES-8
Deborah Watkins, PhD, MPH	Reproductive System	Associations between urinary phenol and paraben concentrations and markers of oxidative stress and inflammation among pregnant women in Puerto Rico	TUES-62
Thomas F Webster, DSc	Other: Mixtures of endocrine disruptors	Biological effects of mixtures of endocrine disruptors: The "synergy" of new developments in toxicology, epidemiology and exposure science	MON-48
Abby G Wenzel, BS, MS	Reproductive System	Assessing the prevalence of phthalate metabolites in a population of pregnant women	MON-64
Susan L Whittemore, PhD	Cardiovascular System	Early PAH Exposure Impacts Cardiac Function in Xenopus laevis	MON-3
Sara E Wirbisky	Nervous System	Developmental origins of neurotransmitter and transcriptome alterations in adult female zebrafish exposed to atrazine during embryogenesis	
Kimberly Yolton	Nervous System	Using Early Infant Neurobehavioral Assessment to Assess Impact of Gestational Exposure to Environmental Toxicants	TUES-24
Changcheng Zhou, PhD	Cardiovascular System	Bisphenol A Increases Atherosclerosis Mediated by the Human PXR	MON-4
Marya G. Zlatnik, MD, MMS	Reproductive System	Reproductive Environmental Health Education for OB/GYN Specialists	TUES-63
Ami R Zota, ScD, MS	Other: Exposure Assessment	Fetal accumulation and metabolism of PBDE flame retardants during second trimester of pregnancy	TUES-34



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# NOTES




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